clining years, may look with pleasure upon the ornaments which he had designed while yet a youthful aspirant to professional honours, without the annoyance of seeing them in a mouldering condition, or else half obscured by soot. But in London, whenever I see an elevation, after ten or a dozen years' completion, with a clean surface, and presenting the natural colour of the stone, I always expect to find symptoms of slow, gradual, and certain disintegration from the surface of the stone. Such process of decay may be unobserved in months or seasons, but an insignificant cause will produce a very surprising effect when continued for ages.

It may appear difficult to explain the reason of so much difference in the durability of materials procured from the same locality; but such variety is not peculiar to the Caen stone district alone; it is so with Portland stone, it is so with Bath, with Anston, and I believe it to be the same with all other stones. The numerous old and new buildings in this great metropolis alone, without mentioning any in the provinces, will abundantly prove my assertion."

C. H. SMITH.

PROFESSOR COCKERELL'S LECTURES ON ARCHITECTURE.

THE second lecture of the course on architecture, at the Royal Academy, was delivered on Thursday, the 11th inst. Having in his former lecture endeavoured to reply to any scepticism in reference to the existence of true theoretical principles of architecture, the professor further urged the necessity of inquiring into their nature. The successful pursuit of every art and science required, first, intuitive feeling; and second, the acquirement of sound theory. He argued that, without the first, as it was hopeless to attempt to teach music to one who had never whistled a tune, so it was to expect that education and labour would, to the requisite extent, supply the want of a natural aptitude for the art of architecture. He mentioned the case of Sir John Leech, who had commenced the study of architecture, but relinquished a pursuit for which he found himself unfitted, for the profession of which he became one of the brightest ornaments.—But, however fortunate the student might be in natural qualifications, he had still much to derive from theory. It might, therefore, be expected that these principles should be attempted to be established by writers, but it was somewhat disappointing to find their perspicuous development lost in metaphysical speculation, of which we might almost say—as had been sometimes said of the philosophy of Kant,—that it was doubtful whether the writer himself understood what he was attempting to enunciate. Criticism might assist the student in gaining the correct views he was in want of, were it dictated by any settled principles. But the critic dealt his blows right and left: we found sounding terms, but what these were he failed to tell us. Certainly we were invited to expect some clear doctrines in the place of all such demonstration; but, after the indulgence of much ill blood, we were left to ask—in plain *parlance*—is there a theory of architecture, and what is it?

The professor argued that the existence of such a theory was as undeniable as the existence of fixed laws in the works of the great Architect of the Universe; and he proceeded to indicate the way in which that theory might be discovered.—The objects in nature and art were the same: beauty of form and colour were the ends contemplated by both. Regularity was the pervading principle of the works of nature, in which every thing was dictated by the purest taste and the most refined geometry. This was instanced by the beautiful process of crystallization. Peculiar uses became peculiar ornaments—the ornament was co-existent with, and arising out of the use.

We were, perhaps, in the habit of taking many things as mere appendages, without sufficient inquiry into their origin. For example, in the case of the horns of animals—as of the bull and stag. In southern countries, where means of defence were most required in the animal, we found the long horns of oxen, whilst nearer home short horns were common; and so, in inquiring into the development of all the works of nature, we should first trace an object of utility, and afterwards that the forms were those which conduced to ornament. The architect raised the arch and vault, and counteracted the thrust by buttresses, and the casual observer believed these beautiful features were so placed for ornament alone. But if the architect employed a roof with tie beams, and consequently avoided thrust, he dispensed with buttresses, and could substitute columns, and a character accordant with the altered construction. If he had to design a building for a southern latitude, where it was desirable to make the windows small, his design was not discordant with that object, but effect was gained by breadth, and the character given by the piers. But in a northern latitude, where the admission of the sun's rays was to be courted, he imparted character to the *windows*, and followed what was called the "fenestral" order of composition. And thus the skilful architect turned every circumstance of climate or purpose into a source of beauty. For it was only the pedantic architect who applied to all countries, and on all occasions, the same features, and who thus lost the lesson which nature gave. Of this our own empire furnished most striking instances. Instead of applying in particular climates such styles as had originated in similar climates, the lesson of nature, and all previous art, taught nothing to the modern architect. The stoa, or portico, which might be desirable in a southern climate, might, in a northern, be a nuisance, unless glazed, as were the cloisters. The Grecian Doric order, on the Acropolis, seemed to grow out of the rockwork itself; but when placed in our modern streets, and combined with vertical lines, it appeared out of place, like an elephant in a cage. So, place upon a lofty pedestal an elaborate Gothic building with pinnacles and statues, and the effect would be equally inappropriate.

Thus, the professor said, structure was seen to be an important element in art, and out of it arose numerous and surprising results. No fabric could equal the most ordinary one of nature, and if Sir Joshua Reynolds had said that painting was the art of seeing nature, we might say that architecture was the art of understanding it. In proof of the immediate advantage which was to be gained by a study of nature, the professor cited the instance he had given,* on former occasions, of the derivation of the construction of the dome of the cathedral at Florence from the structure of the human skull,—the great difference between this example and that at the Pantheon, in the openings, and particularly in the size of piers, the construction of which he could not be altogether aware of, rendering it necessary that Brunelleschi should devise some method which should combine strength with great lightness. The professor illustrated this part of the subject by a sketch on the board, shewing in section the two thicknesses of the skull, and he also shewed that all the bones, on the same principle, combined strength with lightness. He also gave the other instance, in the derivation of the steeple of St. Bride's Church, with its spiral staircase and central pillar or newel, from a common form of spiral shell having a similar *columella*.† In St. Paul's we might not discover the same direct adaptation, as in Wren's other work just mentioned, but the professor shewed that it was not less the work of a child of nature. He also contrasted the methods practised in the domes, and for the support of the lanterns in St. Paul's, and in the Pantheon at Paris, by Soufflot, and said he could not conceive why the French architect had neglected the simple model of the baptistry at Pisa, which Wren was doubtless well acquainted with, as he was with everything else, and why he should have used the three domes, and why the middle dome, when the other method appeared to be equally convenient in the section. It could only have arisen from the mere bravado of doing something different. The professor, also, alluding to the foresight of Wren, mentioned the stability of the foundation of St. Paul's, and said that openings to the casements were provided only on that side of the building where the cold and damp air would not be likely to find admittance.—We have not space to do justice to all the instances which were given of the analogy between architecture and nature, seen even in the structure of shells, in which was noticed the principle which had been applied in one of the latest improvements of ship building, nor to do more than mention the beautiful passage in a work of Sir Charles Bell, in which the most striking instances of mechanical skill were shown to be infinitely surpassed in the structure of the human form, evidencing as these did, the creative power which the persecuted Galileo saw even in the straw on the floor of his dungeon. The professor reserved for future notice many instances of this analogy in more minute details, as in the parallel cases of the right lines of architecture, and the line of the horizon at sea, and in the similarity of the forms of waves, and the outlines of sinuous mouldings. He cited such instances to show the uniformity which must exist in all styles, and that the great principles of taste must be always the same. He had shown that there was a theory in art as in nature, that we spoke of "the great Architect of the Universe," that there was one great school of architecture, and that there was no other school, or "taste," or prophet under heaven, which could be compared with it; that it was not the knowledge of various styles, and not the going to Greece or Rome, which made the true architect, but that the flowers of the field offered better models than could be found in the works of man, and that if a national style was ever to be established, nature presented the true road to the grand in architecture.

* To be continued.

* *Vide* THE BUILDER, vol. 6, p. 63.

† *Vide* vol. 6, p. 62.

THE CHICHESTER SCHOOL COMPETITION.

Mr. John Elliott has published some correspondence on this matter, involving two or three curious points. It seems that the money was provided by subscription for a memorial of Bishop Otter, and that a school being determined on as the form of the memorial, a competition took place several years ago, and a plan submitted by Mr. Elliott being considered the best, he was elected the architect. The matter remained dormant for a time, but his design, he states, was retained on the understanding that he was to be employed when the work was commenced.

On the appearance of the recent advertisement requesting plans for a school to be sent in competition, Mr. Elliott put forth his claim to the appointment, and as it seems to us (knowing nothing more of the circumstances than what appears in print), with great right. He had spent money on a chance in a lottery, and had drawn the prize, such as it was: it seems rather too bad to tell him afterwards there was no prize.

The reply by the Rev. Mr. Parrington to his application was, that the "Otter memorial committee had handed over their whole powers and trust to the committee of the Chichester Training School," and that they knew nothing of his appointment: knew nothing of his plans.

But, says Mr. Elliott,—"The 'handing over of powers and trust' from one committee to another, surely implies the handing over also of obligations and liabilities. I will take the case that the present committee select a design from those to be sent in; they promise the architect that he shall be employed, but circumstances prevent the intention so formed and announced from being carried into immediate effect; in the mean time, some of the members of this committee are changed, a change in the extent of the plan is deemed necessary, not in its purpose,—would either or both these changes afford the shadow of a pretence for disregarding the claim of the architect who had devoted his time and his talent on the chance of being so elected, and who, being successful, had a moral right to the fruits of his labour? And in what respect, permit me to ask, does my case differ from this imaginary one? I devoted my time to preparing designs and estimates in a similar competition, and I was successful: for several years the matter has been in abeyance, but considering that I was in the hands of honourable men, who would, when the time arrived, fulfil what had been promised to me, I made no application whatever for remuneration of any kind." He further offered, without extra